



2625
EFW

In re Application of:

MANABU OHGA

Application No.: 09/940,491

Filed: August 29, 2001

For: IMAGE PROCESSING APPARATUS, CONTROL
METHOD THEREOF, AND IMAGE PROCESSING
METHOD

Docket No. 00862.022343.

Examiner: Ali bayat

Group Art Unit: 2625

Date: February 28, 2005

Mail Stop Amendment

THE COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

Transmitted herewith is an Amendment in the above-identified application.

☒ No additional fee is required.

The fee has been calculated as shown below

CLAIMS AS AMENDED						
	(2) CLAIMS REMAINING AFTER AMENDMENT		(4) HIGHEST NO. PREVIOUSLY PAID FOR	(5) PRESENT EXTRA	RATE	ADDITIONAL FEE
TOTAL CLAIMS	* 19	MINUS	** 20	= 0	x \$25 \$50	0
INDEP. CLAIMS	* 5	MINUS	*** 5	= 0	x \$100 \$200	0
Fee for Multiple Dependent claims \$180°/\$360						0
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT---						0

* If the entry in Column 2 is less than the entry in Column 4, write "0" in Column 5.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, write "20" in this space.

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, write "3" in this space.

- ☐ Verified Statement claiming small entity status is enclosed, if not filed previously.
- ☐ A check in the amount of \$_____ is enclosed.
- ☐ Charge \$_____ to Deposit Account No. 06-1205. A duplicate copy of this sheet is enclosed.
- ☒ Any prior general authorization to charge an issue fee under 37 C.F.R. 1.18 to Deposit Account No. 06-1205 is hereby revoked. The Commissioner is hereby authorized to charge any additional fees under 37 C.F.R. 1.16 and 1.17 which may be required during the entire pendency of this application, or to credit any overpayment, to Deposit Account No. 06-1205. A duplicate copy of this paper is enclosed.
- ☐ A check in the amount of \$_____ to cover the fee for a _____ month extension is enclosed.
- ☐ A check in the amount of \$_____ to cover the Information Disclosure Statement fee is enclosed.
- ☒ Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

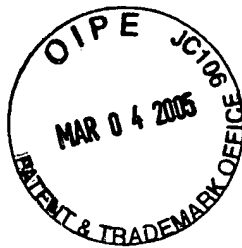
Respectfully submitted,



Leonard P. Diana
Attorney for Applicant
Registration No.: 29,296

FITZPATRICK, CELLA, HARPER & SCINTO
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00862.022343.



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
MANABU OHGA) Examiner: Ali Bayat
Application No.: 09/940,491) Group Art Unit: 2625
Filed: August 29, 2001)
For: IMAGE PROCESSING)
APPARATUS, CONTROL)
METHOD THEREOF, AND)
IMAGE PROCESSING)
METHOD) February 28, 2005

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REQUEST FOR RECONSIDERATION

Sir:

In response to the Office Action of November 29, 2004, Applicant submits
the following remarks:

I hereby certify that this correspondence is being deposited with the
United States Postal Service as first-class mail in an envelope addressed
to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-
1450 on

February 28, 2005.

(Date of Deposit)

Leonard P. Diana (Reg. No. 29,296)

(Name of Attorney for Applicant)

Signature

February 28, 2005

Date of Signature

Claims 1-19 remain in this application, of which Claims 1, 7, 13, 18 and 19 are independent.

Applicants note with appreciation the indication that Claims 3-5, 9-11 and 15-17 would be allowable if rewritten so as not to depend from a rejected claim, and with no change in scope. Those claims have not been so rewritten because, for the reasons given below, their base claims are believed to be allowable.

In the outstanding Office Action, Claims 1, 2, 6-8, 12-14, 18 and 19 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication 2002/0145611 A1 (Dye et al.). After a careful study of the Office Action and the prior art, however, Applicant finds himself unable to agree with this rejection, for the following reasons.

As is described in the present application, it is known to use caching techniques to avoid spending excessive time in calculating the proper output colors for given input colors in color image processing. If the proper output for a given input color has already been calculated once, that is, the result can be stored, so that the calculation need not be repeated. If the image is one in which the number of input colors is very high, however, not only does this not save time, but the process of checking to see if the output color for a new input pixel has already been calculated can itself lead to very disadvantageous increases in processing overhead. Where the number of input colors is relatively low (for example, in a background portion where the color is relatively uniform), this method of storing previously calculated outputs in a cache memory can be very efficient.

In the aspects of the present invention to which the various independent claims are directed, a conversion converts an input color to an output color in a predetermined processing unit which is to be applied to the conversion and has a plurality of pixels, by utilizing a cache memory. The cache memory cache memory caches a calculation result of a calculator which calculates an output color corresponding to an input color. The present invention controls a caching method to be applied to a subsequent processing unit based on a cache hit rate per the processing unit.

In contrast, *Dye* relates to a video controller system that has a cache 625 and a hit/miss control logic bloc 620. The hit/miss control logic block 620 determines whether texture data from a texture engine 602 resides in the cache 615 or not. If such texture data is not cached, the hit/miss control logic block 620 initiates a memory control unit to fetch the texture data from a main memory 110. In other words, the *Dye* system *controls the readout of texture data* based on whether the texture data hits the cache or not. Applicant cannot, however, see how this would provide any suggestion of controlling caching method based on a cache hit rate, as recited in Claim 1. Applicant strongly believes, consequently, that the apparatus of Claim 1, and the other respective independent claims, are allowable over *Dye*.

A review of the other art of record has failed to reveal anything which, in Applicant's opinion, would remedy the deficiencies of the art discussed above, as a reference against the independent claims herein. Those claims are therefore believed patentable over the art of record.

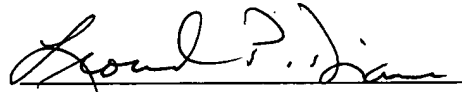
The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the

same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Leonard P. Diana", written over a horizontal line.

Leonard P. Diana
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